

# Utility Patent Application

## CONFIDENTIAL INFORMATION

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## DISPOSABLE PAPER BIB

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## RELATED APPLICATIONS

This is a Continuation in Part Application of U.S. Application Serial No. 09/578,042, filed on 05/24/00 and pending, which was a Continuation Application of U.S. Application Serial Number 09/425,879, filed on 10/22/99 and pending, which was a continuation of U.S. Application Serial No. 08/661,355, filed June 11, 1996, and 08/827,889, filed on 04/14/97, both now abandoned.

## BACKGROUND OF THE INVENTION

### 1. Field of the Invention

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The present invention relates generally to infant bibs and the like and, more particularly, to a disposable paper bib for use in a rolled dispensing

manner.

2. Description of the Related Art

In the related art, several baby bibs designed for temporary use are known. Of particular interest are U.S. Patent No. 3,329,969, to Farber, et al., and U.S. Patent No. 4,620,323, to Tepper, wherein disposable baby bibs are disclosed for protection against drips. The bibs described by these patents are expensive to manufacture and are generally not easily stored and distributed in mass quantities. Also of interest is U.S. Patent 4,884,299, to Rose, which discloses dispensing means for disposable bibs. While these patents show some of the common features incorporated in baby bibs, none of these bibs prevent the spillage of food, liquid or other matter onto the bib wearer's lap and none provide enhanced protection to the upper portion to the bib wearer's shirt and collar.

A bib incorporating the cost savings and benefits of standard rolled paper towels or packaged napkins and providing protection to the bib wearer's shirt and lap would overcome the problems associated with the prior art. Consequently, a need has been felt for providing such a disposable bib that is inexpensive to manufacture and provides greater protection from spilled solids, liquids and other matter.

SUMMARY OF THE INVENTION

It is therefore an object of the present invention to provide an improved disposable paper bib.

It is another object of the present invention to provide a multi-layered disposable bib that absorbs foods and liquids in order to contain spills and to avoid soiling of the bib wearer's clothing, the chair in which the bib wearer is sitting, and the floor surface below the bib wearer. The bib wearer may be a child, a senior citizen, a dental or medical patient or any other individual needing protection from spills.

Yet another object of the present invention is to provide an inexpensively manufactured and disposable bib that is easily dispensed in a perforated roll or fan-fold manner.

It is a feature of the present invention to provide an improved absorbent and disposable bib that includes an absorbent first layer that is contained by a non-permeable second layer.

According to the preferred embodiment of the present invention, a disposable paper bib is provided that is constructed of paper materials with a waterproof backing.

Advantages of the present invention include an improved, easy to use, inexpensive, convenient, and disposable method of providing spill protection for

infants or senior citizens without the expense of trouble of traditional fabric bibs.

BRIEF DESCRIPTION OF THE DRAWINGS

The advantages and features of the present invention will become better understood with reference to the following more detailed description and claims taken in conjunction with the accompanying drawings, in which like elements are identified with like symbols, and in which:

FIG. 1 is an exploded perspective view of a disposable bib for absorbing liquids, shown in accordance with one preferred embodiment of the present invention;

FIG. 2 is a top view thereof;

FIG. 3 is a top view of an alternate embodiment showing a separate supporting means; and

FIG. 4 is a perspective view of a plurality of the bibs depicted in FIG. 1, positioned into a roll with perforations at regular intervals to provide individual bibs that may be separated from the roll.

DESCRIPTION OF THE PREFERRED EMBODIMENTS

The best mode for carrying out the invention is presented in terms of its preferred embodiment, herein depicted within the Figures

### 1. Detailed Description of the Figures

Referring now to the figures, a paper bib 10 is shown, according to the present invention, forming a generally rectangular planar surface 12 having a first vertical edge 14 parallel to and opposite from a second vertical edge 15. As will be described in greater detail below, it is envisioned in a preferred embodiment that a plurality of linearly aligned bibs 10 will be formed, manufactured, packaged, and provided in a rolled form for ease of dispensing and use. To accommodate the manufacturing of such a rolled assembly, it is envisioned that the first vertical edge 14 be straight and smooth, and parallel to the second vertical edge 15, which is also envisioned to be equally straight and smooth. Extending downward from the main planar surface 12 at the lower boundary of the bib 12 is a concave lower protrusion 16. In its best mode, this lower protrusion is formed in a symmetric, curvilinear manner having an upward arching lowermost point that smoothly transitions at each end to a horizontal extension at each of the side-most portions of the lower perimeter edge of the bib 10. In its best mode, this upper indentation 20 is formed in a symmetric, curvilinear manner having an upward arching lowermost point that smoothly transitions at each end such that the lowermost point 25 of the indentation 20 is approximately one-half inch ( $\frac{1}{2}$  inch) below a line drawn between the points at each of the side-most portions of the upper perimeter edge of the bib 10. As will

be described in greater detail below, it is envisioned in a preferred embodiment that a plurality of linearly aligned bibs 10 will be formed, manufactured, packaged, and provided in a rolled form for ease of dispensing and use. To accommodate the manufacturing of such a rolled assembly, it is envisioned that the convex upper indentation 20 is capable of mating smoothly with the concave lower protrusion 16 of a separate but adjacent bib 10, thereby allowing such a roll of preformed bibs to be manufactured and packaged in a similar manner as and utilizing similar conventional equipment as is currently utilized in the manufacture and packaging of perforated rolled paper towels. In this manner, it has been found that a perforation formed at two tears per inch would provide sufficient bib element separation.

For purposes of disclosure of best available mode, and not by way of limitation of the design or functionality of the present invention, a bib element 10 having a sufficiently large planar surface 12 for coverage for the specific intended use would have an overall width of 9-1/2 inches and an overall length of approximately 14-1/2 inches. .

Referring to FIG. 2-4, an additional functional element of the present invention includes a supporting means for retaining an individual bib element 10 in a vertical, supported location below a user's neck, over the user's chest, and optionally above the user's lap. It is envisioned that a variety of such supporting

means can be utilized, individually or in combination, for providing this retaining function. For example, a separate environmental structure, such as a chain, clip, strap, or the like, can be mechanically affixed to each upper tab 22 and around the wearer's neck in order to support the bib element 10. However, the preferred embodiment is incorporated in a neck ring perforation 24 placed near, but slightly below the uppermost edge, and formed in a circular manner, forms a head opening. As shown, the neck ring perforation 24 is placed, at its center, 3-1/2 inches below the the lowermost point 25 of the indentation 20. Such a perforation is formed at three tears per inch. It is envisioned that the overall diameter of the neck ring perforation 24 would be approximately four inches, centered about the vertical centerline. The formation of such a neck ring perforation 24 allows the formation of a neck opening orifice while providing an additional level of strength to prevent said orifice from causing the tearing of the bib element material completely to the side edge.

Alternately, and potentially additionally it is envisioned that adhesive tabs can be provided to augment the supporting means. Such adhesive tabs are envisioned as including conventional tape, or specifically pressure sensitive latex adhesive.

Finally, although various materials of construction, such as paper or plastic in an otherwise conventional manner, for purposes of disclosing the

preferred embodiment the preferred commercial bib element 10 is formed of a nonwoven product named AIRTEX(TM), a smooth calendered, lower linting fabric composed of virgin bleached wood pulp fiber and a polymer emulsion.

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## 2. Operation of the Preferred Embodiment

The bib 10 can be utilized in the same manner as conventional fabric or plastic bibs. In one preferred embodiment shown in FIG. 4, the bib is manufactured as a length of a plurality of bibs 42 which are perforated at regular intervals, along perforations 40. An individual bib 10 may be easily separated from the roll 42 along a perforation 40, in a manner similar to separating a paper towel from a paper towel roll. Perforations may include any combination of short and long slits or scores separated by short and long areas of bib material. Scores are meant to include indentations in the bib material that do not extend all the way through the bib material.

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Thus, there has been shown and described absorbent bibs for absorbing spilled or dripped liquids, solids and other matter which fulfills all the objects and advantages sought therefore. Many changes, modifications, variations and other uses and applications of the subject invention will, however, become apparent to those skilled in the art after considering this specification and the accompanying drawings which disclose preferred embodiments thereof. All such changes,

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modifications, variations and other uses and applications which do not depart from the spirit and scope of the invention are deemed to be covered by the invention, which is limited only by the claims which follow.